



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/960,503	09/24/2001	Takayuki Shimizu	1614.1192	7233
21171	7590	06/28/2005	EXAMINER	
STAAS & HALSEY LLP SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			PHAN, HANH	
			ART UNIT	PAPER NUMBER
			2638	

DATE MAILED: 06/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/960,503

Applicant(s)

SHIMIZU, TAKAYUKI

Examiner

Hanh Phan

Art Unit

2638

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 September 2001.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 2 and 6-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 6 and 8-11 is/are rejected.
- 7) ☒ Claim(s) 2 and 7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>09/24/01</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is responsive to the Amendment filed on 04/08/2005.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 8 is rejected under 35 U.S.C. 102(b) as being anticipated by Taylor (US Patent No. 5,938, 309).

Regarding claim 8, referring to Figure 1, Taylor teaches an apparatus comprising:

a multiplexing unit (i.e., optical combiner 70, Fig. 1) that receives a plurality of wavelength division multiplexed optical client signals as a WDM signal (i.e., OC-12 transmitters 20, OC-48 transmitters 40 and 50, and OC-192 transmitter 30, Fig. 1), and individually receives at least one other optical client signal (i.e., OC-48 transmitter 60, Fig. 1) provided to the multiplexing unit (i.e., optical combiner 70, Fig. 1) through at least one transponder (i.e., OC-48 remodulator 62, Fig. 1), and that wavelength division multiplexes together the received WDM signal and the individually received at least one other optical client signal, to thereby output a wavelength division multiplexed light which comprises the first plurality of optical client signals and the individually received at least one other optical client signal (col. 3, lines 30-67 and col. 4, lines 1-19).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 6 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taylor (US Patent No. 5,938,309) in view of Zhou et al (US Patent No. 6,445,850) and further in view of Toyohara (US Patent No. 6,271,948).

Regarding claims 1, 6 and 11, referring to Figure 1, Taylor teaches a WDM (Wavelength Division Multiplex) terminal device located in a WDM network, the WDM terminal device comprising:

a multiplexing unit (i.e., optical combiner 70, Fig. 1) that receives a first plurality of wavelength division multiplexed optical client signals as a WDM signal (i.e., OC-12 transmitters 20, OC-48 transmitters 40 and 50, and OC-192 transmitter 30, Fig. 1), and individually receives at least one other optical client signal (i.e., OC-48 transmitter 60, Fig. 1) provided to the multiplexing unit (i.e., optical combiner 70, Fig. 1) through at least one transponder (i.e., OC-48 remodulator 62, Fig. 1), and that wavelength division multiplexes together the received WDM signal and the individually received at least one other optical client signal, to thereby output a wavelength division multiplexed light which comprises the first plurality of optical client signals and the individually received at least one other optical client signal (col. 3, lines 30-67 and col. 4, lines 1-19).

Taylor differs from claims 1, 6 and 11 in that he fails to specifically teach a first compensator that collectively optically compensates dispersion of each wavelength of the first plurality of wavelength division multiplexed optical client signals and a transmission amplifier that collectively adjusts levels of the first plurality of wavelength division multiplexed optical client signals. However, Zhou in US Patent No. 6,445,850 teaches a first compensator that collectively optically compensates dispersion of each wavelength of the first plurality of wavelength division multiplexed optical client signals (Fig. 2c, col. 9, lines 25-50) and Toyohara in US Patent No. 6,271,948 teaches a transmission amplifier that collectively adjusts levels of the first plurality of wavelength division multiplexed optical client signals (Fig. 3, col. 3, lines 25-52). Therefore, it would have been obvious to one having skill in the art at the time the invention was made to incorporate the first compensator that collectively optically compensates dispersion of each wavelength of the first plurality of wavelength division multiplexed optical client signals and the transmission amplifier that collectively adjusts levels of the first plurality of wavelength division multiplexed optical client signals as taught by Zhou and Toyohara in the system of Taylor. One of ordinary skill in the art would have been motivated to do this since Zhou suggests in col. 9, lines 25-50 and Toyohara suggests in column 3, lines 25-52 using such the first compensator that collectively optically compensates dispersion of each wavelength of the first plurality of wavelength division multiplexed optical client signals and the transmission amplifier that collectively adjusts levels of the first plurality of wavelength division multiplexed optical client signals have advantage of allowing compensating for losses introduced by the transmission fiber,

and return accumulated dispersion at the end of the transmission fiber to zero or a desired nonzero value.

5. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Taylor (US Patent No. 5,938, 309) in view of Toyohara (US Patent No. 6,271,948).

Regarding claim 9, Taylor differs from claim 9 in that he fails to teach an amplifier collectively optically amplifying the plurality of wavelength division multiplexed optical client signals as the WDM signal before the WDM signal is received by the multiplexing unit. However, Toyohara in US Patent No. 6,271,948 teaches an amplifier collectively optically amplifying the plurality of wavelength division multiplexed optical client signals as the WDM signal before the WDM signal is received by the multiplexing unit (Fig. 3, col. 3, lines 25-52). Therefore, it would have been obvious to one having skill in the art at the time the invention was made to incorporate the amplifier collectively optically amplifying the plurality of wavelength division multiplexed optical client signals as the WDM signal before the WDM signal is received by the multiplexing unit as taught by Toyohara in the system of Taylor. One of ordinary skill in the art would have been motivated to do this since Toyohara suggests in column 3, lines 25-52 using such the amplifier collectively optically amplifying the plurality of wavelength division multiplexed optical client signals as the WDM signal before the WDM signal is received by the multiplexing unit has advantage of allowing compensating for losses introduced by the transmission fiber and increasing the power level of the signal to a desired level.

Art Unit: 2638

6. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Taylor (US Patent No. 5,938,309) in view of Zhou et al (US Patent No. 6,445,850).

Regarding claim 10, Taylor differs from claim 10 in that he fails to teach a compensator that collectively optically compensates dispersion of the plurality of wavelength division multiplexed optical client signals as the WDM signal before the WDM signal is received by the multiplexing unit. However, Zhou in US Patent No. 6,445,850 teaches a compensator that collectively optically compensates dispersion of the plurality of wavelength division multiplexed optical client signals as the WDM signal before the WDM signal is received by the multiplexing unit (Figs. 2c, col. 9, lines 25-50). Therefore, it would have been obvious to one having skill in the art at the time the invention was made to incorporate the compensator that collectively optically compensates dispersion of the plurality of wavelength division multiplexed optical client signals as the WDM signal before the WDM signal is received by the multiplexing unit as taught by Zhou in the system of Taylor. One of ordinary skill in the art would have been motivated to do this since Zhou suggests in col. 9, lines 25-50 using such the compensator that collectively optically compensates dispersion of the plurality of wavelength division multiplexed optical client signals as the WDM signal before the WDM signal is received by the multiplexing unit has advantage of allowing compensating the dispersion of the optical signals.

Allowable Subject Matter

6. Claims 2 and 7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

7. Applicant's arguments with respect to claims 1, 2, 6 and 7 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Art Unit: 2638

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh Phan whose telephone number is (571)272-3035.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kenneth Vanderpuye, can be reached on (571)272-3078. The fax phone number for the organization where this application or proceeding is assigned is (703)872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-4700.


HANH PHAN
PRIMARY EXAMINER